## Material Salety Data Sheet

U.S. Department of Labor

28 (E)

Occupational Safety and Health Administration

Required under USDL Safety and Health Regulations for Shipyard Employment (29 CFR 1915)

OMB No. 1218-0074 Expiration Date 05/31/86

Manufacturer's Name MALLINCKRODT, INC				·	
LIMPLINOUSONI , INC.			Em (606	ergency Te 5) 987-	lephone Numl 7000
Address (Number, Street, City, State, and ZIP Code) P. O. Box M			Chemical Name and Synonyms Acetic Acid, Fe-1		
Paris, KY 40361			Trade Name and Synonyms Glacial Acetic Acid,	Ethano	ic Acid
10120, 111			Chemical Organic Acid Formula Family	cH <sub>3</sub> COC	Н
Section II—Hazardous Ingredients					
Paints, Preservatives, and Solvents	%	TLV (Units)	Alloys and Metallic Coatings		% TLV (Uni
Pigments			Base Metal		
Catalyst			Alloys		
/ehicle			Metallic Coatings		
Solvents			Filler Metal Plus Coating or Core Flux		
Additives			Others		
Others Acetic Acid	100	)			
Hazardous Mixtures of Other Liquids, Solids or Gase	 \$	<u></u>		:	% TLV (Ün
Section III-Physical Data			Specific Gravity (H <sub>2</sub> O=1)	I	
Boiling Point (°F)	245	5°F	Specific Gravity (1120 – 1)		1.05
/apor Pressure (mm Hg.) @ 20°C	11	.4	Percent Volatile by Volume (%)		100
/apor Density (AIR=1)	2	2.1	Evaporation Rate = 1)		
Solubility in Water Complete	:				
		7	t		
Clear, colorless	liquid	SCIO	g vinegal odol		
Clear, colorless Section IV-Fire and Explosion Hazard Data	liquid	i, stroi	Flammable Limits Lel	- Ju	Jel
Clear, colorless Section IV-Fire and Explosion Hazard Data Flash Point (Method Used)	liquid	i, stroi		4	Jel 16
Clear, colorless Section IV-Fire and Explosion Hazard Data Flash Point (Method Used)  (Tag Closed Cup) 109°F	liquid	, stroi			
Clear, colorless  Section IV-Fire and Explosion Hazard Data  Flash Point (Method Used)  (Tag Closed Cup) 109°F  Extinguishing Media  Carbon dioxide, dry chemical a	`		Flammable Limits Lel		
Clear, colorless Section IV-Fire and Explosion Hazard Data Flash Point (Method Used)  (Tag Closed Cup) 109°F Extinguishing Media  Carbon dioxide, dry chemical as Special Fire Fighting Procedures	nd alc	cohol fo	Flammable Limits Lel	4	16
Clear, colorless  Section IV-Fire and Explosion Hazard Data  Flash Point (Method Used)  (Tag Closed Cup) 109°F  Extinguishing Media  Carbon dioxide, dry chemical a	nd alc	cohol fo	Flammable Limits Lel	4	16
Clear, colorless  Section IV-Fire and Explosion Hazard Data  Flash Point (Method Used)  (Tag Closed Cup) 109°F  Extinguishing Media  Carbon dioxide, dry chemical at Expecial Fire Fighting Procedures  Water spray or mist decreases	nd alc	cohol fo	Flammable Limits Lel	ing ap	16
Section IV-Fire and Explosion Hazard Data Flash Point (Method Used)  (Tag Closed Cup) 109°F  Extinguishing Media  Carbon dioxide, dry chemical at Special Fire Fighting Procedures	nd alc	cohol fo	Flammable Limits Lel	4	

Threshold Lim TWA 10	<sub>ii Value</sub> Oral ppm Derma	(Rat 1 (R	S-2 ) LD <sub>50</sub> 33, abbit) LI	0 mg/kg 1.06	g/kg					
Effects of Ove				APORS:		ting to eyes,	nose, t	hroat, a	nd lungs.	
Inhalat	ion of vap	ors i	nay cause	serious	damage	to mucous men	mbranes.			1
	st Aid Procedures	EYE	S: Immedi	ately f	lush wi	th water for 1	15 minut	es. Was	h under ey	elids, ca
physici		Ren	nove conta	minated	clothi	ng under showe	er, flus	h with w	ater for 1	5 minutes
call ph physici						respiration i				
physici	an. INGES	LION	DO NOT	INDUCE	VORITIEN	G. If conscio	ous, giv	e water,	call phys	ician.
Section VI-Re	eactivity Data							,		
Stability	Unstable		Conditions to A		•					
	Ctable	-	When hea	ted to	decompos	sition, emits	toxic c	arbon die	oxide and	carbon
	Stable	Х	monoxide	•					taring the second	
Incompatibility	(Materials to Avoid	1)				-			··	
			d, nitric	acid,	sodium p	peroxide and s	trong o	xidizers	•	
Hazardous Dec	composition Produ	cts								
Hazardous	May Occur		Conditions to A	roid .						······································
Polymerization	Way Occur		Conditions to A	volu ·						
	Will Not Occur									-
		Х				3				
		· · · · · · · · · · · · · · · · · · ·			1					· · · · · ·
	oill or Leak Proce	<del> </del>	looped or Seilled		1					
Steps to be Tak	en in Case Materi	al is Re	'		ach Mi	r with water	##			
Steps to be Tak	en in Case Materi	al is Re	'		sh. Mi	x with water	if neces	ssary. S	Scoop up,	neutrali
Steps to be Tak  Cover co	en in Case Materi	sur	faces with	n soda a		x with water	if neces	ssary. S	Scoop up,	neutrali
Steps to be Tak  Cover co	en in Case Materi ontaminated	sur	faces with	n soda a		x with water	if neces	ssary. S	Scoop up,	neutrali
Steps to be Tak Cover co slurry,	en in Case Materi ontaminated flush with	sur	faces with	n soda a		x with water	if neces	ssary. S	Scoop up,	neutrali
Steps to be Tak  Cover co  slurry,  Waste Disposal	en in Case Materiontaminated flush with Method	sur exc	faces with	n soda a	rain.					
Steps to be Tak  Cover co  slurry,  Waste Disposal	en in Case Materiontaminated flush with Method	sur exc	faces with	n soda a	rain.	x with water				
Steps to be Tak  Cover co  slurry,  Waste Disposal  1) Liqu	en in Case Materiontaminated flush with Method	sur exc	faces with	n soda a	rain.					
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent	en in Case Materion taminated flush with Method acid maburner.	exc	faces with	n soda a ter to d at base	of inc	inerator or m	ixing w	ith flamm	nable solv	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal	en in Case Materion taminated flush with Method acid maburner.	exc	faces with essive was injected	n soda a ter to d at base	of inc		ixing w	ith flamm	nable solv	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp	en in Case Materion taminated flush with Method acid ma burner.  1 quantitiecial Protection	exc  exc  y be  es si	faces with essive was injected	n soda a ter to d at base	of inc	inerator or m	ixing w	ith flamm	nable solv	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote	en in Case Materion taminated flush with Method acid ma burner.  1 quantiti ecial Protection lection (Specify Ty	exc  y be  es sinforma	faces with essive was injected hould be o	n soda a ter to d at base	of inc	inerator or m	ixing w	ith flamm	nable solv	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con	en in Case Materion taminated flush with Method acid ma burner.  1 quantiti ecial Protection lection (Specify Tytained bre.	exc  y be  es sinforma	faces with essive was injected hould be o	n soda a ter to d at base	of inc	inerator or m	ixing w	ith flamm	nable solv	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con	en in Case Materion taminated flush with Method acid ma burner.  1 quantiti ecial Protection lection (Specify Ty	exc  y be  es sinforma	faces with essive was injected hould be o	n soda a ter to d at base	of inc	inerator or m	ixing w	ith flamm	nable solv	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con	en in Case Materion taminated flush with Method acid ma burner.  1 quantiti ecial Protection lection (Specify Tytained bre.	exc exc y be es sl nforma	faces with essive was injected hould be o	n soda a ter to d at base	of inc	inerator or m	ixing w	ith flamm	nable solv	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con Ventilation	en in Case Materion taminated  flush with  Method id acid ma burner.  1 quantiti ecial Protection I ection (Specify Ty tained bre.  Local Exhaust  Mechanical (Ge	exc exc y be es sl nforma	faces with essive was injected hould be o	n soda a ter to d at base	of inc	inerator or m  ter, neutralia  Special Other	ixing w	ith flamm	nable solv	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con Ventilation	en in Case Materion taminated  flush with  Method id acid ma burner.  1 quantiti ecial Protection I ection (Specify Ty tained bre Local Exhaust Mechanical (Ge X	exc exc y be es sl nforma	faces with essive was injected hould be o	n soda a ter to d at base	of inc	inerator or m  ter, neutrali  Special  Other	ixing w	ith flamm	nable solve	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con Ventilation	en in Case Materion taminated flush with Method id acid ma burner.  1 quantiti ecial Protection I ection (Specify Ty tained bre. Local Exhaust Mechanical (Ge X s Rubber	exc exc y be es sl nforma	faces with essive was injected hould be o	n soda a ter to d at base	of inc	inerator or m  ter, neutrali  Special  Other	ixing w	ith flamm	nable solve	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con Ventilation  Protective Gloves	en in Case Materion taminated flush with Method id acid ma burner.  1 quantiti ecial Protection I ection (Specify Ty tained bre. Local Exhaust Mechanical (Ge X s Rubber	exc exc y be es si	faces with essive was injected hould be o	at base	of inc	inerator or m  ter, neutrali  Special  Other	ixing w	ith flamm	nable solve	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con Ventilation  Protective Gloves Other Protective Lab coat	en in Case Materion taminated  flush with  Method id acid ma  burner.  1 quantiti ecial Protection I ection (Specify Ty tained bre.  Local Exhaust Mechanical (Ge X  s Rubber Equipment	exc exc y be es si	faces with essive was injected hould be o	at base	of inc	inerator or m  ter, neutrali  Special  Other	ixing w	ith flamm	nable solve	ent in a
Steps to be Tak Cover co slurry,  Waste Disposal 1) Liqu solvent 2) Smal Section VIII-Sp Respiratory Prote Self-con Ventilation  Protective Gloves Other Protective Lab coat Section IX-Spe	en in Case Materion taminated flush with Method acid ma burner.  1 quantiti ecial Protection lection (Specify Tytained bred bred bred bred bred bred bred br	exc y be es sl nforma pe) athin	faces with essive was injected hould be officen ag apparate	at base	of inc	inerator or m  ter, neutrali  Special  Other	ixing w	ith flamm	nable solve	ent in a
Steps to be Tak  Cover co  slurry,  Waste Disposal  1) Liqui  solvent  2) Smal  Section VIII-Sp Respiratory Prote Self-con Ventilation  Protective Gloves  Other Protective Lab coat  Section IX-Spe Precautions to be	en in Case Materion taminated flush with Method acid ma burner.  1 quantiti ecial Protection lection (Specify Tytained bred bred bred bred bred bred bred br	exc  y be  es sl  nforma  pe)  athin  neral)	faces with essive was injected hould be office alls, face	at base	of inc	inerator or m  ter, neutrali  Special  Other	ixing wi	ith flamm	nable solv	ent in a
Steps to be Tak  Cover co  slurry,  Waste Disposal  1) Liqui  solvent  2) Smal  Section VIII-Sp Respiratory Prote Self-con Ventilation  Protective Gloves  Other Protective Lab coat  Section IX-Spe Precautions to be Protect	en in Case Materion taminated flush with Method acid ma burner.  1 quantiti ecial Protection lection (Specify Tytained bred bred bred bred bred bred bred br	exc  y be  es sinforma  pe)  athin  meral)	faces with essive was injected hould be office alls, face Storing al damage.	at base	of inc	inerator or m  ter, neutrali  Special  Other  Protection Splas	ixing wing zed, and	ith flamm	nable solv	ent in a
Steps to be Tak  Cover co  slurry,  Waste Disposal  1) Liqui  solvent  2) Smal  Section VIII-Sp Respiratory Prote Self-con Ventilation  Protective Gloves  Other Protective Lab coat  Section IX-Spe Precautions to be Protect	en in Case Materion taminated flush with Method acid ma burner.  1 quantiti ecial Protection lection (Specify Tytained breding Local Exhaust Mechanical (General Equipment, apron, cocial Precautions e Taken in Handling against phydropper cap	exc  y be  es sinforma  pe)  athin  meral)	faces with essive was injected hould be office alls, face Storing al damage.	at base	of inc	inerator or m  ter, neutrali  Special  Other  Protection  Splas	ixing wing zed, and	ith flamm	nable solv	ent in a

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